Temperature Probe & Thermometer Calibration

In the kitchen we rely on a number of temperature checks, using both the food probe and the thermometers in the fridges and freezers. It is important that we check these regularly to ensure they are working correctly, and these checks need to be recorded on the attached form as part of your 'due diligence'.

Food Probe calibration:

The kitchen team will use the ice-point method to verify the accuracy of food probes. This is known as calibration.

To use the ice-point method:

- Ensure each food probe is identified with an identifying number in permanent ink.
- Insert the thermometer probe into a cup of ice.
- Add a little cold water.
- Stir the ice with the probe until the temperature reading stabilises before reading the temperature.
- Temperature measurement should be 0 °C (± 1 °C). If not, the first step is generally to change the battery of the probe, but if this does not resolve the problem, the probe may be recalibrated. Generally it is best to replace the probe, as recalibration can be more expensive than buying a new probe.

The kitchen team will check the accuracy of the food probes:

- At regular intervals (at least once per week)
- If dropped
- If used to measure extreme temperatures, such as in an oven
- Whenever accuracy is in question

Fridge and Freezer Thermometer/Gauge Checking

Fridges and freezers have a range of built-in thermometers that are used to confirm the units are working correctly. Because of their design, it is not possible to calibrate them in the same way as a food probe, and so a comparative test must be made to ensure they are working correctly.

To use the comparative method:

- Ensure the food probe is calibrated using the above procedure
- Fridges
  - Ensure the probe is clean using a probe wipe and insert it into a product in the middle of the fridge
  - Close the door and allow the temperature to stabilise
  - Write down the temperature of the fridge gauge, then the food probe on the record form
- Freezer
  - Place the food probe between two packs of frozen food in the middle of the freezer
  - Close the door and allow the temperature to stabilise
  - Write down the temperature of the freezer gauge, then the food probe.
- The two temperatures should be compared. They should be within ± 1 °C. If not, a number of steps should be taken.
  - As the thermometer is showing an air temperature, you must keep the door closed long enough to allow the fridge/freezer to come to the same temperature as the food inside it. Try leaving the door closed for longer.
  - If this does not solve the problem, some digital fridge gauges have batteries that can be changed. This may resolve the issue.
  - In other instances, the gauge should be replaced when the fridge/freezer is next serviced. As a temporary measure:
    - Tape over the faulty thermometer/gauge.
    - Provide a replacement freezer/fridge thermometer. These can be freestanding or hang from the shelf in the unit. Use a thermometer designed for fridges/freezers, which should cost £1-£2.

The kitchen team will check the accuracy of the fridge/freezer thermometer or gauge:

- At regular intervals (at least once per week)
- If dropped
- Whenever accuracy is in question

Probe/Fridge/Freezer Calibration Record

Date

Complete weekly

Probe Number	**Ice point temp ºC**	**Satisfactory?**	**Corrective Action Taken**

Fridge Number	Probe ºC	Gauge ºC	OK?
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

Freezer Number	Probe ºC	Gauge ºC	OK?
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

Corrective Action:

Tester	Print Name	
	Sign	

File with kitchen paperwork